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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/614,555 | 07/07/2003 | Thomas H. Peter | 142-96 DIV CON (0008UP DI | 5774 |
| 28249 | 7590 | 11/05/2004 | EXAMINER | |
| DILWORTH & BARRESE, LLP 333 EARLE OVINGTON BLVD. UNIONDALE, NY 11553 | | | SERGEANT, RABON A | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1711 | |

DATE MAILED: 11/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/614,555

Applicant(s)

PETER ET AL.

Examiner

Rabon Sergent

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okazaki et al. ('623) or Koyama et al. ('399), each in view of Gajewski ('689 or '806) or Kulp et al. ('488) or Ruprecht et al.

The primary references disclose the coating of flexible substrates with linear polyurethane prepolymers, which are cured with chain extenders, such as diols, having applicants' claimed molecular weight, and diamines.

3. The primary references fail to disclose the use of a rotational casting method; however, such methods were known to be useful for casting or coating polyurethanes on substrates. This position is supported by the teachings of the secondary references. Therefore, since one of ordinary skill in the art would have reasonably expected that virtually any known casting technique would be suitable for use with the polyurethanes of the primary references, the position is taken that it would have been obvious to select the known rotational casting process from the known field of polyurethane casting techniques and to employ such a process with the

compositions of the primary references, so as to arrive at the claimed method. The selection of such a method is considered to be analogous to the selection of an obvious design choice.

4. Furthermore, while the primary references fail to specifically recite the use of a secondary aliphatic amine with a diol chain extender to cure the prepolymer, patentees do disclose secondary amine chain extenders, such as piperazine. Since it has long been known that cure or reaction profiles of polyurethanes can be controlled based on the reactivity of the chain extender, the position is taken that it would have been obvious to tailor the reaction profiles, depending on the requirements of the rotational casting process, by using blends of curing agents, including the disclosed diols and secondary amines, so as to arrive at the instant invention. Furthermore, it would have been obvious to select foams as being suitable substrates for the production of the composites, since the application of coverings or skins to foams has long been known in the art.

5. Applicants have essentially argued that there is no motivation to employ the rotational casting process with the polyurethane compositions of Okazaki et al. or Koyama et al. The examiner has considered this argument; however, the position is maintained for the aforementioned reasons that it would have been *prima facie* obvious to select a rotational casting process from virtually any casting process known to be useful for the application of polyurethanes onto a substrate. Having taken the position that the selection of the rotational casting technique is *prima facie* obvious, the examiner has looked to the record for evidence of nonobviousness. Accordingly, the examiner has considered applicants' examples within the specification for showings of unexpected results attributable to the claimed rotational casting process. However, the examiner has not found adequate showings of unexpected results based

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upon the examples; none of the examples demonstrate that the selection of the casting technique is critical in situations where the composition is representative of the compositions of the prior art. The comparative examples of the specification vary such parameters as the curing agent or the branching of the prepolymer; however, none of them establish that the use of a casting technique, other than rotational casting, with a polyurethane composition that corresponds to that of the prior art, which is considered to be fully analogous to the instant composition, yields an unexpected result.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (571) 272-1079.

R. Sergent
October 28, 2004


RABON SERGENT
PRIMARY EXAMINER